

Challenging the Grammar of Schooling: Individually Guided Education, 1969-1979

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The late 1950s and the 1960s witnessed the emergence of a series of educational innovations, which can be divided into the following four categories. First, concerns for equality of opportunity led to efforts at achieving desegregation and the use of extensive busing for transporting students to consolidated schools and/or districts (Carlson, 1996; Pulliam & Patten, 1999). Second, the successful launch of Sputnik led American secondary schools to increase the number of courses in math, science, and foreign languages, while the federal government sponsored a number of curriculum projects with an emphasis on the structure of discipline (Pinar, Reynolds, Slattery, & Taubman, 1995; Pulliam & Patten, 1999). Third, influenced by such sources as the civil rights movement, the English primary schools, and several critics of public education, a number of school districts established various forms of "open classrooms" across the nation (Cuban, 1993; Perrone, 1976). Fourth, a group of innovators tried to reorganize schools vertically into "multi-aged" or "non-graded" classes and horizontally into such instructional organizations as "team teaching" and "differentiated staffing" (Rippa, 1997).

Sharing an educational philosophy with the fourth group, the developers of Individually Guided Education (IGE) at the Wisconsin Research and Development Center (Wisconsin R&D Center, or Wisconsin Center, or Center hereafter), the University of Wisconsin-Madison, and the Institute for the Development of Educational Activities, Inc. (I/D/E/A/), an educational affiliate of the Charles F. Kettering Foundation, designed the program as an alternative to the traditional age-graded, self-contained form of elementary schooling. In a

typical IGE (multi-unit) school, according to Klausmeier, Rossmiller, and Saily (1977), the principal shares his/her authority with leaders of units in making decisions on managerial and technical affairs and reaches decisions by consensus rather than unilaterally. The leader of a unit shares his/her authority with unit teachers in making decisions on such unit matters as planning, grouping, instructing, grading, and reporting to parents; then unit teachers carry out and evaluate instructional programs cooperatively. Students in multi-aged (e.g., ages 6-8) units learn in various groups ranging from the whole unit meeting to large group, medium group, small group, and one-to-one. Students progress based on their achievement, not based on their age or grade. Building facilities are modified to meet these organizational and instructional needs. Finally, a group of IGE schools builds a network (called League) so that IGE practitioners share ideas, materials, and instructional approaches (Klausmeier et al., 1977).

The Program²

The creation of the ideal IGE school relied in large part on the development of two major components on which the total seven-component IGE system was built: the Multi-unit School Organization (MUS) and the Instructional Programming Model (IPM) (Klausmeier, Quilling, Sorenson, Way, & Glasrud, 1971b; Walter, Gardner, & MacDermot, 1975).³

The Multi-unit School Elementary (MUSE)

Figure 1 displays the prototype

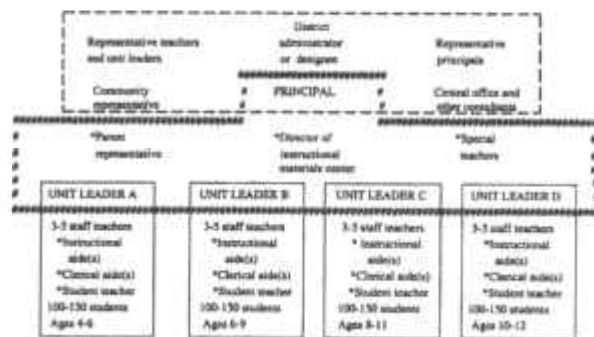


Figure 1.1. The Multiple Organization

Source: from *Individually Guided Elementary Education: Concepts and Practices*, by H. J. Klausmeier, R. A. Rosenshine, & M. Seely (Eds.), (p. 12), 1977, New York: Academic Press.

————— Instruction and Research Unit;

----- Instructional Improvement Committee;

..... Systemwide Program Committee.

*Inclusion of these persons will vary according to particular school settings.

organization of a MUSE consisting of 400-600 students (Klausmeier et al., 1977). Klausmeier et al. (1971b) stated that the organizational structure would consist of interrelated parties at three different levels of operation: the Instruction and Research (I&R) unit at the classroom level, the Instructional Improvement Committee (IIC) at the building level, and the System-wide Program Committee (SPC) or a comparable administrative organization at the district level. Klausmeier et al. (1971b) also explained that personnel serving at each of two levels would provide the communication linkage. A typical I&R unit, which would replace the age-graded, self-contained classroom, would include the following personnel: "a unit leader..., two or three staff teachers, one first-year or resident teacher, one instructional secretary, one intern, and 100-150 students" (Klausmeier et al., 1971b, p. 20). The major functions of the I&R unit would be: "(1) to plan, carry out, and evaluate instructional programs for each student in the unit; (2) to engage in continuous inservice staff development activities; (3) to provide preservice teacher education activities; and (4) to plan and conduct cooperatively, often with other agencies, a systematic program of research and development" (Walter et al., 1975, p. 8).

The IIC would consist of the principal and the unit leaders (Klausmeier et al., 1971b). The four major functions of the IIC would be: "(1) stating the general educational objectives and outlining the educational program for the entire school building; (2) interpreting and implementing systemwide and statewide policies that affect the educational program of the building; (3) coordinating the activities of the I&R units to achieve continuity in all curricular areas; and (4) arranging for the use of the time, facilities, and resources that are not managed independently by the units" (Walter et al., 1975, p. 8).

The SPC would be chaired by the school superintendent or his designee and involve consultants and other central office staff, representative principals, unit leaders, and teachers. The SPC would fulfill four decision-making and facilitative responsibilities: "(1) identifying the functions to be performed in each MUSE of the district; (2) recruiting personnel for each MUSE and arranging for their inservice education; (3) providing instructional materials; and (4) disseminating relevant information within the district and community" (Walter et al., 1975, p. 8).

The Instructional Programming Model (IPM)

IGE developers stated that at the center of the IGE system would be the Instructional Programming Model (IPM) for the individual student (see Figure 2). Taking into consideration "the beginning level of performance, rate of progress, style of learning, motivational level, and other characteristics of each pupil in the context of the educational program of the school" (Walter et al., 1975, p. 8), this model would provide instructional programming for the individual student in the cognitive, affective, and psychomotor realms. The IPM was designed to be used either with categorically stated instructional objectives that enumerated mastery, or with broad objectives that implied activities to

be completed or progress to be made (Walter et al., 1975).

The Growth and Decline of IGE

After its development in 1966, the I&R unit was deemed to provide a superior organizational design for culturally disadvantaged children as well as an exemplary solution to

Department of Public Instruction evaluated and selected the multi-unit concept for statewide adoption, installation and maintenance. This involvement of the State Department helped to increase the number of the multi-unit schools in Wisconsin to 99 by the school year 1970-71. Additionally, a total of 65 multi-unit schools were established in seven other states by the same year (Klausmeier, Quilling, & Sorenson, 1971a).

After witnessing a dramatic increase in the number of IGE schools, the developers at the Center proposed the multi-unit concept for nationwide dissemination to the U.S. Office of Education which accepted the proposal and granted financial support for the nationwide installation of IGE in 1971 (Klausmeier et al., 1971b). In an effort to facilitate the nationwide installation and continuation of IGE, the Center led state education agencies to establish formal state IGE networks in 23 states⁵ and a dozen or more informal or semiformal networks by the end of 1975 (Parker, 1977; Walter et al., 1975). From 1971 to 1975, the developers at the Wisconsin R&D Center (and I/D/E/A/),⁶ following the IGE Change Model based on the then-prevalent Research, Development and Diffusion Model, engaged in massive implementation efforts, providing financial/ technical assistance, leadership development workshops, and teacher training programs to State/Regional IGE Coordinating Councils, teacher education institutions, intermediate education agencies, district and school policymakers, administrators, and practitioners (Barrows, Klenke, & Heffernan, 1979; Walter et al., 1975). Thanks to these efforts, combined with the financial support of almost thirty million dollars from three government agencies and two foundations, at least 3,000 schools were implementing IGE in forty states at the peak of this movement in 1976-77 (Parker, 1977).

Towards the late 1970s, however, IGE faded in prominence, according to the major developer of IGE, due largely to the withdrawal of federal support, the following cessation of the

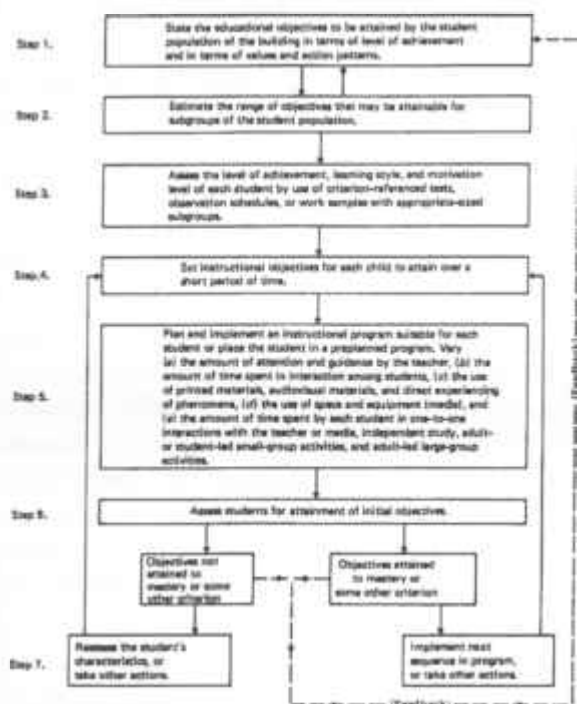


Figure 1.2. Instructional Programming Model in IGE
Source: from *Individually Guided Elementary Education: Concepts and Practices*, by H. J. Klausmeier, R. A. Rosenfield, M. Saily (Eds.) (p. 16), 1977, New York: Academic Press.

instructional problems for all children. Thus, school districts adopted I&R units by way of planning grants under either Title I or Title III of the Elementary and Secondary Education Act (ESEA)⁴ (Klausmeier, Goodwin, Prash, & Goodson, 1966).

In 1967-68, the first seven multi-unit elementary schools were created in Wisconsin and were found successful in generating higher student achievement and positive student attitudes toward the school (Klausmeier, Quilling, & Wardrop, 1968). In 1968-69, the Wisconsin

Center's curricular and inservice materials development, ill-functioning state IGE networks, a nationwide property tax revolt started in the mid-1970s, and a "back-to-basics" movement that spread across the country (Klausmeier, 1992).

Perspective, Purpose and Data

This study relies on both *fidelity* and *mutual adaptation* perspectives on innovation (e.g., Fullan & Pomfret, 1977; Gross, Giacquinta, & Bernstein, 1971; McLaughlin, 1976; Snyder, Bolin, & Zumwalt, 1992). Those researchers with the former perspective are interested in the degree of implementation of innovation in terms of the extent to which actual use of innovation corresponds to intended or planned use, and factors which facilitate and inhibit such implementation (Fullan & Pomfret, 1977). Those with the latter perspective investigate how innovation is adapted during the implementation process and try to explain what factors affect the process of implementation (Snyder et al., 1992).

Based upon a broad array of primary and secondary sources, including the IGE literature published by the Wisconsin Center, IGE evaluation reports, more than 120 doctoral dissertations, and written interviews with IGE creators, this paper explores: (1) the change process factors that either facilitated or hindered IGE adoption, implementation and institutionalization in four different types of IGE schools categorized by their degree of implementation: opportunistic, nominal, marginal, and true IGE schools; and (2) the degree to which and how the change contents of IGE were adopted, implemented and institutionalized in these four types of IGE schools, 1969-79. The former is related to the dynamics of change for IGE as a sociopolitical process involving all kinds of individual, classroom, school, local, regional, and national factors at work in interactive ways, while the latter is related to the values, goals, contents, and

the consequences associated with IGE (Fullan, 2001).

These two aspects of IGE – the degree to which the prototypic IGE was adopted, implemented, and institutionalized and the change process factors in each phase of IGE innovation – are employed as the criteria of success or failure of IGE. Student achievements and attitudes are not included as criteria in part because these were thought to be affected by several factors that were not directly related to IGE (e.g., novelty effect and/or reliability and validity of instruments used) and in part because many of them were obtained from those schools that claimed to be IGE schools but did not implement IGE at all.

Findings

The Process of Change and Key Factors

Within the history of IGE, several different key factors either facilitated or hindered the processes of IGE innovation: locus of decision, need for a change, readiness, and resources in the phase of mobilization; staff development, role relationship change, and district support in the phase of implementation; and continued inservice, creative modification, and external support in the phase of institutionalization.

The Phase of Mobilization

The first factor, "locus of decision," had more to do with the district administration that made the decision on the adoption of MUSE/IPM than grass-roots staff. This top-down nature of decision making was related to the fact that the major impetus for IGE adoption came from a federal government agency, i.e., the United States Office of Education (USOE). After the USOE awarded the Wisconsin R&D Center a grant to accomplish the nationwide installation effort, the Center established subcontractual relationships with state education agencies in nine states (see note 4) and a teacher education

institution in one state (California) in 1971 to start 20-50 MUSE/IPM schools in each state (Ironside, 1972). In turn, state education agencies made a contract with school districts; and in turn, the central office administration, either alone or with a principal, made a decision to transform a traditional school into an IGE school (Walter et al., 1975).

Thus, after the political decision to select IGE for nationwide dissemination was taken, the focus of the grantee was on obtaining as many adoptions as planned for in as short a time as possible. As a result, the decision to adopt IGE was more or less beyond the control of the staff in the majority of IGE schools. The staff of only a small number of schools participated in the IGE adoption decision and appeared committed to the initiating process. Due to this politicized mobilization, IGE was adopted for symbolic or opportunistic reasons in a number of schools, e.g., Jefferson Elementary,⁷ Wisconsin (Barrows et al., 1979). Consequently, these schools did not implement MUSE/IPM at all, although they were known to have adopted IGE. It was estimated that about 80 (28%) of 287 IGE schools (that participated in the initial nationwide installation of IGE in 1971-72) fell into this category of "opportunistic" IGE schools (Ironside, 1972).

The remaining three mobilizing factors—"need for a change," "readiness," and "resources"—pertained more to the staff at the building level than those at the central office. According to Barrows et al. (1979), the staff of Davis Elementary, Wisconsin had not been looking for an alternative to traditional education, nor involved in the decision to adopt IGE, which was done by administrators. Not surprisingly, feeling no need for change, the staff was uninterested in training opportunities for the initiation of IGE and rarely called upon external support resources for initiation training. Moreover, while Davis acquired some IGE materials, it had inadequate facilities for or did

not utilize facilities in tune with IGE. Unlike those of an opportunistic school, however, some teachers of Davis approved of IGE after being acquainted with the program and helped the principal adopt the program. According to several sources (Barrows et al., 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), schools like Davis, that would be called "nominal" IGE schools⁸ (Romberg, 1985), accounted for approximately 38% of 287 schools.

Like the staff of Davis, the staff of Sawyer Elementary, Wisconsin had not been looking for an alternative to traditional education and were not involved in the decision to adopt IGE (Barrows et al., 1979). Unlike the staff of Davis, however, a majority of Sawyer's staff became interested in IGE because of the opportunities they saw for students. Supported by the central office, Sawyer acquired IGE materials, transformed traditional facilities into those in tune with IGE, and called upon external support resources for initiation training. According to the sources (Barrows et al., 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), schools like Sawyer, that would be called "marginal" IGE schools, made up about 16% of 287 schools.

In contrast to the above characterizations, a majority of the staff of Rise Elementary, Wisconsin had been looking for an alternative to traditional education, made a joint decision to initiate IGE, and often displayed a willingness to work extra hours in adopting the program (Barrows et al., 1979). Rise accumulated IGE materials; the school arranged for open space and had a library/instructional materials center (IMC) available for the purpose of IGE-related instruction; and the school called on such opportunities as consultants, site visits, and several types of training for initiation (Barrows et al., 1979). According to the research (Barrows et al., 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), schools like Rise, that would be called "true or

actual" IGE schools, constituted about 18% of 287 schools.

The Phase of Implementation

Staff Development. Unlike many other federally funded programs that paid less attention to the phase of implementation, several types of training opportunities for the implementation of MUSE/IPM were sponsored by the Wisconsin R&D Center, state education agencies, teacher education institutions, and school districts starting 1971-72. These opportunities included: the "train chain" (national overview, state conference, local commitment, school leader training, and local staff training), specific workshops and institutes, and activities that schools, districts, or Leagues arranged (Ironside, 1972).

The principal and unit leaders of a nominal IGE school, Wilkens Elementary, New Jersey, attended a state-sponsored staff development workshop in 1971 (Ironside, 1972). The principal and unit leaders also participated in a few League activities; however, there were no such opportunities for staff teachers or others. The total staff saw various IGE films once or twice; a 1-day session served as an overview; and a few teachers attended a reading workshop. After these initial training sessions, however, school personnel had virtually no contact with other persons, schools, agencies, or materials related to MUSE/IPM. A number of resources from the state coordinator were stored away for future perusal by the staff. Inservice training was limited to what might occur during unit meetings or came to a standstill (Ironside, 1972).

The principal, unit leaders, and a few teachers of a marginal IGE school, Nelson Elementary, South Carolina, went to a state-sponsored staff development workshop in 1971. The principal also attended a meeting for state and district commitment. One day in the spring had been devoted to full-staff awareness and overview of the patterns. All staff attended a Preschool Workshop held in August 1971. After

initial training, the principal and unit leaders attended several League training sessions and a R&D Center-sponsored mid-year training workshop. Unit leaders and a few teachers made scheduled visits to other IGE schools in the vicinity. While Nelson called on a variety of resources (state coordinator, district liaison, visiting consultants, and the League), the great share of training was directed toward the principal and unit leaders. Further, there was very little inservice training for the whole staff (Ironside, 1972).

The principal and unit leaders of a true IGE school, Birch Lake Elementary, Minnesota, attended a state-sponsored staff development workshop in 1971. The staff participated in 1-day local commitment/awareness session followed by Preschool Workshop held for two days in September 1971. After initial training, the principal called on state coordinator for training materials and assistance with IGE subjects. The principal, unit leaders and teachers made visits to other MUSE/IPM schools in fall 1971. The principal attended League training sessions and school personnel attended workshops sponsored by the R&D Center. Also, school-wide inservice took place several times, in one case for two days, another for one day, and several for an hour or two. Unit inservice was not the rule, though: a few units held one hour inservice sessions for whole year; one unit held sessions for two and a half hours; and a few units held none (Ironside, 1972).

Role Relationship Change. In a nominal IGE school (Wilkens), principals, unit leaders, and teachers did not share common understandings and expectations regarding their role relationships and responsibilities. Thus, there were differences in perceptions regarding role behaviors expected of each participant. Deeply ingrained in the established institutional practices, the past expectations of the participants' roles and responsibilities persisted in this school.

In a marginal IGE school (Nelson),

people understood the roles expected of each occupant, but they did not completely overcome not only the conflict between the old and new role relationships and responsibilities within an individual, but also contradictions between role occupants among unit members as well as among the whole personnel as a group. An incongruence between the role expectations and need-dispositions of school personnel caused conflicts in the areas of interpersonal communication and teaching philosophies and methodologies (Heffernan, 1976).

With shared understandings of role relationships and expectations among themselves, school personnel of a true IGE school (Birch Lake) overcame not only the conflict between the old and new role relationships and responsibilities within an individual, but also tensions between the principal and unit leaders as well as among unit members. Whenever there was an interpersonal conflict, they solved these conflicts through constructive discussions during formal unit meetings and informal encounters.

School District Support. Gaddis's (1977) study shows that some districts, to which nominal IGE schools belonged, did not fulfill their commitment to assist schools in implementing IGE and withdrew financial support. Hence, "the aides were cut back or ... completely eliminated from schools," or "the student-teacher program was dropped"; as a result, teachers had a hard time grouping and "there was no clerical help for record keeping" (Gaddis, 1977, p. 192). In addition, the district turned down teachers' request for unit leaders' extra pay; then the school dropped IGE. Some school districts held back their commitment to sponsor IGE when they saw rivalry over district funds between IGE and non-IGE schools. In another case, the former superintendent was very pro-IGE and encouraged schools to go IGE; however, a new superintendent came in with a different

philosophy and discontinued the program. Also, the community contributed to the failure of IGE by not backing rises in local school taxes to support the innovative program (Gaddis, 1977).

In the case of a marginal IGE school (Nelson), the superintendent, and particularly the board of education, were supportive and helpful; and this support included considerable expenditure for materials, travel, and summer workshops. A district reading consultant was assigned to serve MUSE/IPM schools. A district liaison was appointed early, and this person along with the superintendent attended all meetings of the formal training chain except a "national awareness" session; also, this person helped Nelson Elementary with a plan on developing and implementing an IGE curriculum.

A true IGE school (Birch Lake) received adequate moral, financial, and technical support from its school district. The board of education, superintendent, and central office staff were supportive of IGE and provided financial support for remodeling the building, staff development and IGE materials. The district had a strong curriculum committee, which served the district policy function regarding MUSE/IPM in the school district. Also, the district had definite inservice schedule, and devoted summer work to development of objectives and outlines in reading and math.

The Phase of Institutionalization

By the time of institutionalization phase, most nominal and marginal schools either discontinued the IGE program or retained some hybrid organizational forms and instructional practices, while most true IGE schools continued into the institutionalization phase.

Continued Inservice. The principal of a successful IGE school (Alys Drive Elementary, New York) not only participated in training programs such as a principal-unit leader workshop, but also helped the staff attend

several inservice training sessions including district training programs and weekly inservice for the staff (Melvin, 1976). The principal often played an important role in supporting staff development for new members because of turnover in the original cadre of project teachers. Alys Drive occasionally brought in outside speakers for workshops which were open to all IGE schools in the area. Thanks to these training opportunities, a few teachers grew to conduct a workshop for the district, e.g., district's substitute teachers, and serve as consultants for schools in other districts (Melvin, 1976).

Creative Modification. Given the fundamental change that IGE requested of a school and local constraints that hindered a complete institutionalization of MUSE/IPM, a number of successful IGE schools creatively modified the prototypic model of IGE in line with their local circumstances, such as district requirements, parental expectations, teaching philosophy, and student needs.

Since local constraints were preventing the school from developing a differentiated staff teaching multi-aged students, Rocky Mountain Elementary, Colorado organized each team to include students at a single grade level (Klenke, 1975). At Scott Elementary, New Jersey, one team incorporated "very little" multi-age grouping of students; the homeroom groups were by grade level; and instructional groups were formed by ability levels within grade levels (Klenke, 1975).

At Alys Drive, in relation to IPM, general school-wide objectives, as defined in Step 1 of the IPM, were not identified (Melvin, 1976). However, the implementation of Steps 2 through 7 of instructional programming followed the model closely when the teams used the Wisconsin Design for Reading Skill Development (WDRSD) materials and the suggested guidelines for implementation (Melvin, 1976).

External Support. A successful IGE school (Rocky Mountain) pursued IGE because of a mandate by the State Department of

Education and the district's philosophy encouraging individualization (Klenke, 1975). In another true IGE school (Alys Drive), a small group of parents was involved in selecting IGE for adoption, and its implementation and continuation (Melvin, 1976). Also, teacher education institutions not only offered summer workshops for staff members to attend, but also sent their student teachers to be involved in IGE schools.⁹ At the district level, the superintendent or assistant superintendent of the district worked with interested persons from other districts to establish a Hub for the IGE schools, while the board of education granted permission to continue implementing the innovation for a certain period (Melvin, 1976).

The Contents of Change

Shared Decision-Making

Although IGE schools were moving toward decentralization of authority, the principal was still the major decision maker in most of the managerial and curricular domains, and a unilateral decision-making style was predominant over consensual or delegating styles,¹⁰ leaving unit leaders and teachers feeling a lack of involvement in decision-making (Black, 1976; Gramenz, 1974; Ironside, 1973; Moyle, 1977; Nerlinger, 1975; Richardson, 1972). The fundamental issue seemed to revolve around power: the power of the administration to affect school policies on management and curriculum; and the power of one member of a unit to impose his/her will on the others (Pettit, 1980). Thus, the IGE goal of sharing decision making was only moderately achieved, falling far short of the standards that the designers of the prototypic multi-unit model set forth.

In a nominal IGE school (Wilkins) where neither of the authority transfers – from the principal to unit and from individual teachers to units – took place, the principal dominated IIC meetings, provided little opportunity for distribution of decision-making, and handed out

meeting agendas that were more like notes and announcements (Ironsides, 1973). Unit leaders of this nominal school were not committed to the concept of IGE and did not adequately prepare to discuss and defend in the IIC issues of concern to their unit members (Moyle, 1977). The teachers in this school did not perceive a reduction of centralization and perceived themselves to have no involvement in making potent decisions of school-wide scope (Felker, 1980; Wright, 1976).

The principal of a marginal IGE school (Nelson) continued to take initiative in the meetings and announce what amounted to his decisions on many matters. As the implementation progressed, however, unit leaders grew to know how to function in the IIC. At the same time, the principal gradually transferred some of his authority to unit leaders, having them more involved in decisions on school and unit operations (Ironsides, 1972). However, unit teachers had difficulty in turning over their authority to the units in part because they suffered interpersonal conflicts among themselves and in part because they lost the sense of owning students and the feelings of responsibility for classroom events.

In a true IGE school (Birch Lake), both the principal and unit teachers turned over their authority to the units. The principal shared his authority and power to make decisions with unit leaders; thus the IIC meetings were characterized by effective leadership by the principal, give-and-take, productive use of time, and participation by all. In this school, the decision-making was characterized more by consensus, participatory and delegating styles than unilateral one (Ironsides, 1972).

Team Teaching

Ironsides (1972) found that teamwork and unit communication (working, planning, teaching together) comprised a major concern expressed by teachers, and at the same time it was an area frequently indicated as being the

most rewarding during the initial nationwide IGE implementation. The irony was that at the end of 1971-72, 50% of the 700 teachers polled indicated their preference for "doing things as a unit" half the time or less. There might have been satisfaction, but teamwork apparently had only a part-time appeal (Ironsides, 1972).

At Wilkens (nominal), units had a laissez-faire appearance; and they had only general and miscellaneous planning to do rather than a precise set of goals to accomplish within the units. In one unit, an individualized math program was adopted, but there was no cross-teaching, and very little sharing of materials, methods or purposes. Three teachers independently implied that they did not ever expect to share children, rooms, resources, teaching skills, or "real" decisions about "their" classroom (Ironsides, 1972).

In four (marginal) IGE schools of Wisconsin in 1972, unit teachers cooperated in curriculum development and in planning new lessons for the unit but were not willing to relinquish personal, separately developed lessons (Packard, 1973). While most units displayed harmonious interpersonal involvements and fairly strong work relations, some units suffered internal strife. In quiet testimony to the progress of interpersonal relations were the "moving desks." When there was resentment, the desks separated, each moving to an isolated corner; when teamwork continued to grow, the furniture moved back to the edge of the instructional area. The root issue concerning interpersonal problems seemed to be the extent to which unit decisions constrained each member or subgroups to specific behaviors and methods (Packard, 1973).

Unit teachers of a true IGE school (Birch Lake) felt very strongly the support of their fellow teachers. They moved smoothly through planning, scheduling, teaching assignments, and parent communications. They shared children, rooms, resources, and teaching skills; and teams of teachers and aides worked together with

varied groups of students often in an open space area. All units worked out "team groundrules," the units had good leadership and open communication, and the meetings were productive. In doing so, they transformed self-contained classrooms into a team-oriented unit.

While focusing on leadership development workshops, the Wisconsin Center fell short of providing enough training opportunities for IGE practitioners to develop specific skills (e.g., group dynamics skills) so that they could work cooperatively with other team members and solve interpersonal conflicts, many of which were related to educational philosophies and personal traits. Some teachers who could not cooperate with other teachers or did not agree with the IGE philosophy were allowed to transfer, but many of them could not find a place to go. What seemed to reduce these interpersonal tensions but compromised the prototype IGE model was *standardization* of rules and decisions by unit teachers. This standardization, however, is recognized as a dramatic paradox of the IGE movement that promoted quality education by providing for *individual differences*.

Packard (1973) found that, in an IGE school, all units employed the same report cards, lunch schedule, book lists, meeting routines, and class schedules. Clearly, administrative problems were lessened and economies of scale were preserved when all units followed the same procedures. Naturally, according to Packard, the innovation embodied "a new set of standard procedures" which applied equally to all units. Gitlin (1980) describes that at Meadow Elementary, Wisconsin, this standardization not only restricted teachers' capacity to meet student needs or finish a lesson but also made it difficult for teachers to integrate innovative activities into the predetermined schedule. Due to this standardization of regulations and decisions, Gitlin continues, individual teachers were constrained in the range and implementation of ideal curriculum as well as the way they could

cope with student behavior.

Multi-aging

Multi-aging or non-gradedness was the most difficult to achieve among the elements of IGE by all IGE schools with some exceptions because of "district reports, tests, and grade level objectives" and "community norms" that required a comparison of student growth with grade level norms (Klenke, 1975). Without changing any rules or regulations for IGE schools, the school districts insisted on maintaining existing district legal and administrative frameworks on curriculum and record-keeping. In this regard, the IGE Change Model did (or could) not include a legal mandate to have local school districts as well as state education agencies change their legal and administrative frameworks in tune with the IGE system.

Klenke (1975) reports that the county required Rocky Mountain to submit reports with grades, and parents also wanted reports in a graded fashion. At another school called Scott, "despite all effort to deemphasize references to grades and grade levels..., it appeared that the notion of gradedness still existed. 'Kids still know' was the reaction expressed by many staff members" (Klenke, 1975, p. 134). Also, Klenke describes, parents still tended to think of progress in terms of grade level promotion or demotion.

Instructional Programming Model

Ironside and Conaway (1979) report that, in many schools, not only the classic instructional programming model was altered, reduced in some way, but also the pattern of IPM was different within and across units, for example, using the full IPM for some students but not others and stressing some steps in one curriculum but not others. Moreover, Melvin (1976) describes, with standardized instructional procedures under the team teaching approach,

patterns of instructional programming in word attack, comprehension, and mathematics reflected common objectives, a common level of achievement, and a common basic sequence with some variation for individual students. In short, although the instructional programming model was designed theoretically to permit students to individually advance at their own rates, the reality of the grammar of schooling (see below) basically prevented students from having a variety of meaningful learning experiences in many IGE schools.

Discussion

In relation to *change contents*, a number of studies suggest that a new school reform program is subject to modification and can be used to legitimize, rather than change, what is called "the grammar of schooling," i.e., established institutional patterns (Berman & McLaughlin, 1978; Elmore, 1996; Sarason, 1982/1996) or organizational frameworks, including the age-grading of students, the division of knowledge into separate subjects, and the self-contained classroom with one teacher (Tyack & Cuban, 1995; Tyack & Tobin, 1994).

Tyack (1974) testifies that the age-graded, self-contained classroom that the IGE developers tried to replace was promoted in the 1840s by common school advocates (e.g., Horace Mann) who encouraged communities to replace the mixed grouping of students with "grading" of pupils following the Prussian model. Thereafter, the number of non-graded, one-room schools declined from approximately 200,000 in 1910 to 130,000 in 1930 to 20,000 in 1960 and to less than 1,000 in 1980. At the same time, due to the consolidation efforts, the number of local school districts decreased from 127,531 in 1932 to 16,960 in 1973 (Tyack, 1974; Tyack & Cuban, 1995).

According to Tyack and Cuban (1995), the graded school not only was touted as solving major organizational troubles and having pedagogical efficiency, but also had the merit of

being readily replicated when the number of children increased rapidly in cities, no small factor in the frequently congested urban systems. In time, Tyack and Cuban note, the graded school became strongly established as part of the grammar of schooling, despite disapprovals among both educators and non-educators and numerous experimentations with alternatives to the age-graded system. The grammar of schooling, Tyack and Cuban continue, persisted despite determined efforts to replace it in part because it has a solid basis in the social anticipations about schooling held by the general public and in part because it helps teachers fulfill their responsibilities in a foreseeable manner and to deal with the daily tasks that school boards, administrators and parents expect them to perform.

The above explication was supported by a perspective on school organization, noting that rationalized activities are indispensable for school-system functioning for two reasons: (1) "the school system is responsible for a uniform product of a certain quality"; and (2) "socializing children and adolescents for adult roles is massive and complex" (Bidwell, 1965, p. 974). Given that the normal educational technology requires long-term relations between an individual teacher and his/her students, Bidwell continues, not only the activities of the school are divided into nine-month periods, but also this temporal division of labor is connected to school grades that correspond to age-grades embodied in the student body. This firm connection between school grades and age-grades makes students move through the system in batches and not be assigned to school grades separately based on achievement (Bidwell, 1965).

Given the above explanations, the IGE system was too fundamental in its degree of reform, aiming to transform the established grammar of schooling deeply ingrained in the minds of administrators, practitioners and the

public. By the time IGE was promoted, many school districts had been consolidated and consequently established the age-graded, self-contained classroom as their organizational frameworks to move students through the system in batches. Considering the strong hold of the established institutional forms on educators and non-educators, it is not surprising that the three major contents of IGE – sharing decisions, teaching in teams, and multi-aging – were difficult to implement by the majority of IGE schools, while the Instructional Programming Model was not properly used to provide diverse learning opportunities for individual students.

In relation to *change process*, the IGE Change Model was not so sophisticated enough as to help agents of change overcome the hold of the grammar of schooling on school personnel and laymen. Based on the IGE Change Model, state education agencies took the main responsibility for helping schools make the changeover to IGE, and chosen teacher education institutions were responsible for holding institutes and developing academic-year, graduate-level programs (Walter et al., 1975). In addition, the IGE Change Model led to the establishment of formal, informal, and semiformal IGE networks at the state and regional levels in more than 23 states by the end of 1975 (Parker, 1977). However, the structures and functions of the networks varied greatly state-by-state, indicating that the environments for IGE at the state level were not as supportive as those in Wisconsin. Nevertheless, the promotion of IGE by political agencies in power increased the likelihood of IGE adoption. Ironically, however, the involvement of state education agencies decreased the likelihood of effective implementation and continuation of IGE at the building level (Fullan & Pomfret, 1977).

Additionally, as implied in the exploration of the change process factors that hindered the mobilization and implementation of

IGE, the IGE Change Model did not adequately address the complicated implementation processes (Barrows et al., 1979). Above all, the "training chain," a major part of the IGE Change Model, included a hierarchy of personnel as well as a sequence of activities: from state commitment to district and school commitment to school leaders' training to school staff training (Ironside, 1972). However, the "training chain" notion did not succeed in the sense that each district and/or school staff participated in all elements; more important, many school leaders did not feel adequately prepared to pass the training on to their staffs (Ironside, 1972). Thus, the Model fell far short of prescribing comprehensive and systematic strategies for training the staff to transform their educational beliefs, role expectations and relationships, knowledge and skills of teaching/learning process and their attitudes in favor of IGE.

This lack of linkage between the agents of change has often been related to and understood as "loose coupling" (Elmore and McLaughlin, 1988; Meyer and Rowan, 1977, 1978; Weick, 1976). The district has a bureaucracy to organize and manage what happens in schools by, for example, making certain that staff satisfy state and local standards for employment and that schools meet legal requirements for using state and federal money (Cuban, 1992). However, the rigid coupling loosens significantly with regard to classroom instruction that is blended of art and science that do not lend themselves to predictable outcomes (Cuban, 1992; Meyer and Rowan, 1978). This decoupling of instruction from administration and policy making, Cuban (1992) maintains, provides teachers with an autonomy and separation that helps teachers develop a realistic pedagogy to deal with the distinctive nature of the classroom and its requirements (see also Meyer and Rowan, 1978). Further, Cuban (1993) contends that there are limits, of course, on how much and how far teachers can alter

responsibilities for carrying out official policies. For educational change is likely to come from internal changes created by the knowledge, expertise, ideas and values of administrators and teachers (Snyder et al., 1992). At the same time, as Cuban (1993) asserts, since most educational reforms impose an added pile of tasks upon administrators and teachers with limited time and energy, strategic and systematic assistance from outside the classroom and the school is indispensable in executing any planned modification in school organizations and classroom practices.

In order to increase the possibility of institutionalizing a large reform program like IGE, the following implications for change process are drawn. First, during the phase of mobilization, staff teachers need to be involved in decision making on the adoption of an innovation; administrators need to see if the staff teachers desire or welcome change and are ready to embark on a reform program; and school districts need to arrange for adequate facilities, materials, and financial assistance as necessary. Second, during the phase of implementation, school district personnel and the principal need to provide ample opportunities for the staff to attend training programs; the principal and the staff need to spend enough time and energy to change their role relationships and expectations in tune with the new program; and the school district needs to provide continued support for staff development, financial aid, and materials. Third, during the phase of institutionalization, staff teachers need to be allowed to modify as necessary the original prototypic mode of the reform program in tune with the local circumstances; new as well as veteran school personnel need to participate in continued inservice sessions for the program, not only to catch up with but also to refine and renew the program in tune with the local school setting; and continued external support should be provided for school professionals with respect to budget, personnel, service, facility, and materials

support.

Notes

1. This paper is adapted from a paper entitled "Sharing Decisions, Teaching in Teams, and Multi-aging: Individually Guided Education, 1969-1979," that was presented at the 2002 AERA Annual Meeting, New Orleans, LA.
2. This paper is focused more on the Center's program and its involvement in the IGE movement than I/D/E/A's.
3. The other five components are: (a) compatible curriculum materials, (b) evaluation for decision making, (c) Home-School-Community relations, (d) the facilitative environments, and (e) continuing research and development. I/D/E/A's version of IGE (or 35 goals/outcomes for IGE model) also had seven major components or Outcome Clusters as they were called: School Decisions, Unit Organization, Unit Planning and Improvement, The Learning Program, Student Responsibilities, Relationships, and Adoption and Implementation (Fleury, 1993).
4. The ESEA of 1965 states the purpose of Title I (Better Schooling for Educationally Deprived Children) as "to provide financial assistance...to local educational agencies serving areas with concentrations of children from low-income families to expand and improve their educational programs by various means...which contribute particularly to meeting the special educational needs of educationally deprived children," and the purpose of Title III (Supplementary Educational Centers and Services) as "to stimulate and assist in the provision of vitally needed educational services not available in sufficient quantity or quality, and to stimulate and assist in the development and establishment of exemplary elementary and secondary programs to serve as models for regular school programs" (Public Law 89-10, 89th Congress, H. R. 2362, April 11, 1965, pp. 1, 13 as cited in Bailey & Mosher, 1968).

5. California, Colorado, Connecticut, Illinois, Indiana, Minnesota, New Jersey, Ohio, South Carolina, and Wisconsin by the mid-1973; Massachusetts, Rhode Island, South Dakota, and Texas by the end of 1973; and Florida, Kentucky, Michigan, Missouri, New Hampshire, New York, Pennsylvania, Utah, and Virginia by the end of 1974 (Walter et al., 1975).

6. The Institute for the Development of Educational Activities (/I/D/E/A/) joined the Wisconsin Center in publishing inservice materials from 1969 to 1972. However, the difference between these two parties in the policy of using inservice materials led to /I/D/E/A/ engaging in IGE implementation efforts independently (Rebeck, 1977).

7. School names in this paper are all pseudonyms.

8. An evaluation study conducted in 1977 by the Wisconsin R&D Center classified a total of 159 IGE schools (selected through a stratified random sampling from 946 schools) into three groups by the degree of implementation of IGE: nominal, marginal, and true IGE schools (Romberg, 1985). "Nominal" IGE schools (57% of 159) seemingly liked some of the ideas about IGE and wanted to be identified with the concepts, but failed to make the substantial organizational and instructional changes which reflect IGE. "Marginal" IGE schools (19% of 159) were reorganizing their staffs by forming units, sharing decision making, and making efforts to change the pattern of instruction, but encountered several problems in forming units, setting objectives, and obtaining district/parental support; they were not yet IGE but they were no longer a traditional school. "True" IGE schools (24% of 159) were successfully reorganizing their staffs by forming units, sharing decision making, and making efforts to change the pattern of instruction.

9. As of the fall of 1976, a total of 87 teacher education institutions in 14 states (those states that established state IGE networks by the end of 1973) offered IGE courses (Lins & Klausmeier,

1977).

10. Delegated decision making occurs when an IIC member (or members) other than the principal is given responsibility for the final decision; participatory decision making occurs when each member has a voice in the decision process; unilateral decision making occurs when the principal makes the final decision, although the other members may have input; and consensus refers to general or unanimous agreement within the IIC (Loose, 1973).

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